

# Gender Differences in Pathways to Recovery in the Persistent Effects of Treatment Study (PETS) - Chicago

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# Study Objectives

- To examine gender differences in drug use, treatment utilization, and long-term treatment outcomes using data from Chicago Target Cities study

# Gender Differences in Drug Use Initiation

- Women initiate AOD use later, but progress more rapidly to abuse/dependence (“telescoping”)
- Women tend to initiate drug use within context of sexual relationships, men within friendships

# **Gender Differences in Treatment Seeking and Entry**

- Women enter treatment after a shorter period of substance use/abuse
- Women and men differ in referral to and social support for treatment
- Reasons for entering treatment and treatment motivation may also differ
- Barriers to treatment differ (e.g., stigma, transportation, child care)

## **Gender Differences in Social/ Relational Contexts of Use/Recovery**

- Greater drug-crime connection for men
- Responsibility for children may motivate women for recovery
- Women more likely to have substance-using spouse/partner
- Family support differs for men and women

# Factors Associated with Treatment Utilization (DATOS)

## Men

- Spouse opposition to drug use
- Family assistance
- Referred by family, employer, or CJS

## Women

- Exchanged sex for drugs or money
- Self-initiation to treatment
- Referred by social worker
- Antisocial personality disorder
- Single mother

# Research Questions

- Are there gender differences in drug use and treatment initiation?
- Are there gender differences in social/ familial relationships?
- Are gender differences in social/familial relationships related to drug use outcomes at 6- and 24-months following treatment?
- Are there gender differences in the relationship of drug use to other areas of functioning at follow-up?

# Analyses

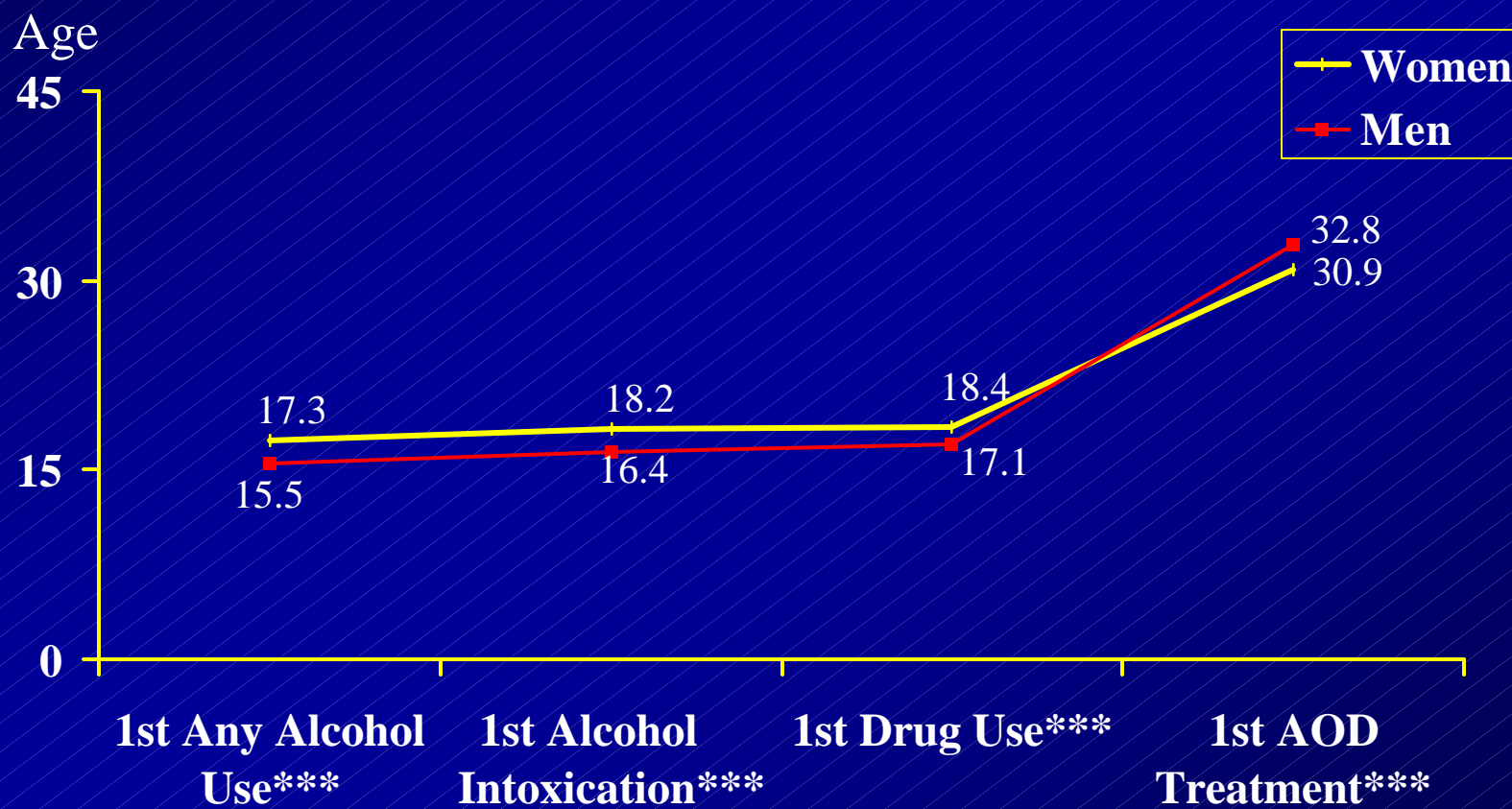
- Bivariate analyses of gender differences in baseline characteristics
- Partial correlations of potential predictor variables with dependent variables
- Path analyses predicting AOD use at 6- and 24-months testing for gender differences
- Correlations between AOD use and ASI composite scores at 24-months

## Background Characteristics

	Women ( <u>n = 652</u> )	Men ( <u>n = 422</u> )
Mean age (SD)**	33.8 (7.1)	35.4 (8.9)
Ethnic group, %		
African American	90.5	94.1
Hispanic	5.1	3.1
White/other	4.4	2.8
Less than HS degree, %	53.2	47.7
Primary substance used, % ***		
Heroin	24.2	19.7
Crack/cocaine	61.0	38.1
Alcohol	11.6	31.5
Marijuana	1.6	10.1

\*\*p < .01, \*\*\*p < .001

# Age at Initiation of AOD Use and Treatment



\*\*\*p < .001

# Drug Use/Treatment History

	Women ( <u>n = 652</u> )	Men ( <u>n = 422</u> )
Initial drug use with, % ***		
Friends	58.0	72.3
Sexual partner	18.2	4.0
Mean no. of drugs ever used (SD)*	2.6 (1.3)	2.3 (1.6)
Prior AOD treatment, % ***	69.2	58.3

\*p < .05, \*\*\*p < .001

## Primary Referral Source (%)

	Women ( <u>n = 652</u> )	Men ( <u>n = 422</u> )
Self, family, or friends	43.4	25.4
Criminal justice system	11.1	40.4
Medical professional	8.2	15.3

$p < .001$

# Criminal Justice Involvement (%)

	Women <u>(n = 652)</u>	Men <u>(n = 422)</u>
On probation or parole***	14.7	41.6
Ever arrested***	66.7	91.3
Ever incarcerated***	56.7	80.7

\*\*\*p < .001

# History of Abuse/Sexual Exchanges (%)

	Women ( <u>n = 652</u> )	Men ( <u>n = 422</u> )
Ever emotionally abused***	44.8	21.7
Ever physically abused***	34.6	11.5
Ever sexually abused***	29.6	5.9
Traded sex for money/drugs***	27.2	15.8

\*\*\*p < .001

## Family Relationships (%)

	Women ( <u>n = 652</u> )	Men ( <u>n = 422</u> )
Lives with:***		
Sexual partner and children or sexual partner alone	25.7	23.3
Children only	15.7	0.5
Has children < 18 years***	89.4	72.4
Lives with children***	41.6	20.6
Lost custody of child***	24.3	6.3
Lost custody because of AOD use	84.3	82.4

\*\*\*p < .001

# Family/Social Relationships (%)

	Women ( <u>n = 652</u> )	Men ( <u>n = 422</u> )
Lives w/someone w/AOD problem***	20.2	14.5
All/most of family/friends are clean & sober***	53.9	41.2
Has serious problems getting along with others***	68.3	55.3
Troubled/bothered by family problems***	43.0	25.4
Troubled/bothered by social problems***	27.8	18.4

\*\*\*p < .001

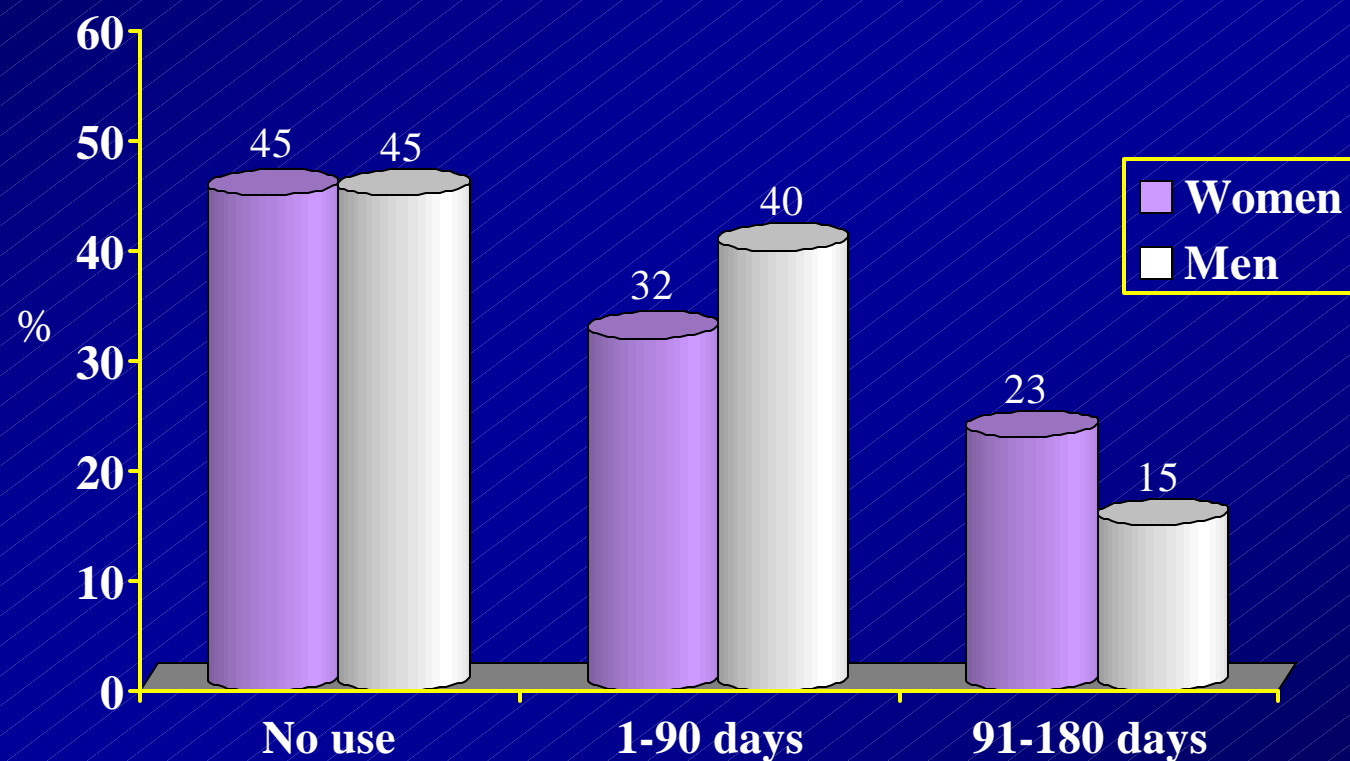
## Type of Treatment Referral at Baseline(%)<sup>1</sup>

	Women ( <u>n = 652</u> )	Men ( <u>n = 422</u> )
Long-term residential (> 28 days)	26.6	0.0
Short-term residential (< 28 days)	40.9	0.0
Halfway house	0.0	32.1
Intensive outpatient	18.9	28.4
Outpatient drug-free	13.6	39.5

p < .001

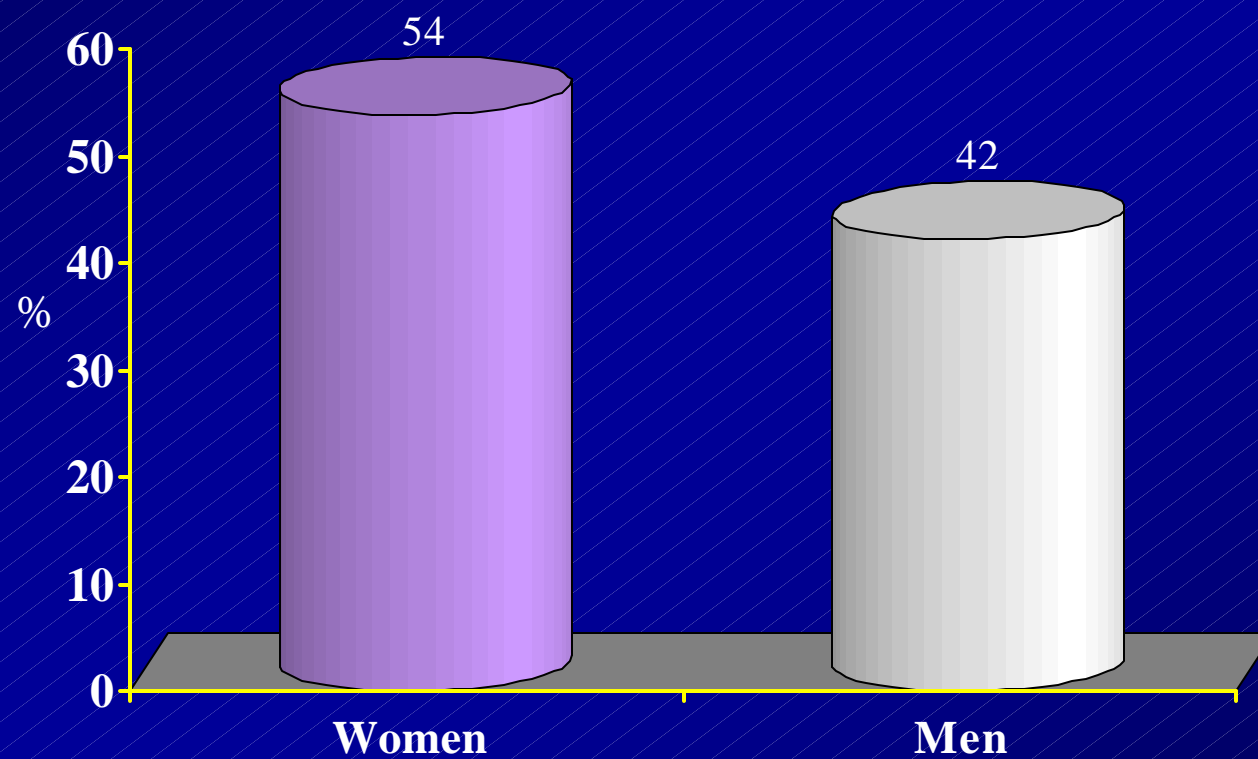
<sup>1</sup>Individuals treated in methadone maintenance were excluded from analyses

# Days of Any AOD Use in Past 6 Months at 24-month Follow-up



$p < .01$

# Treatment Received in Past 6 Months at 24-month Follow-up



$p < .001$

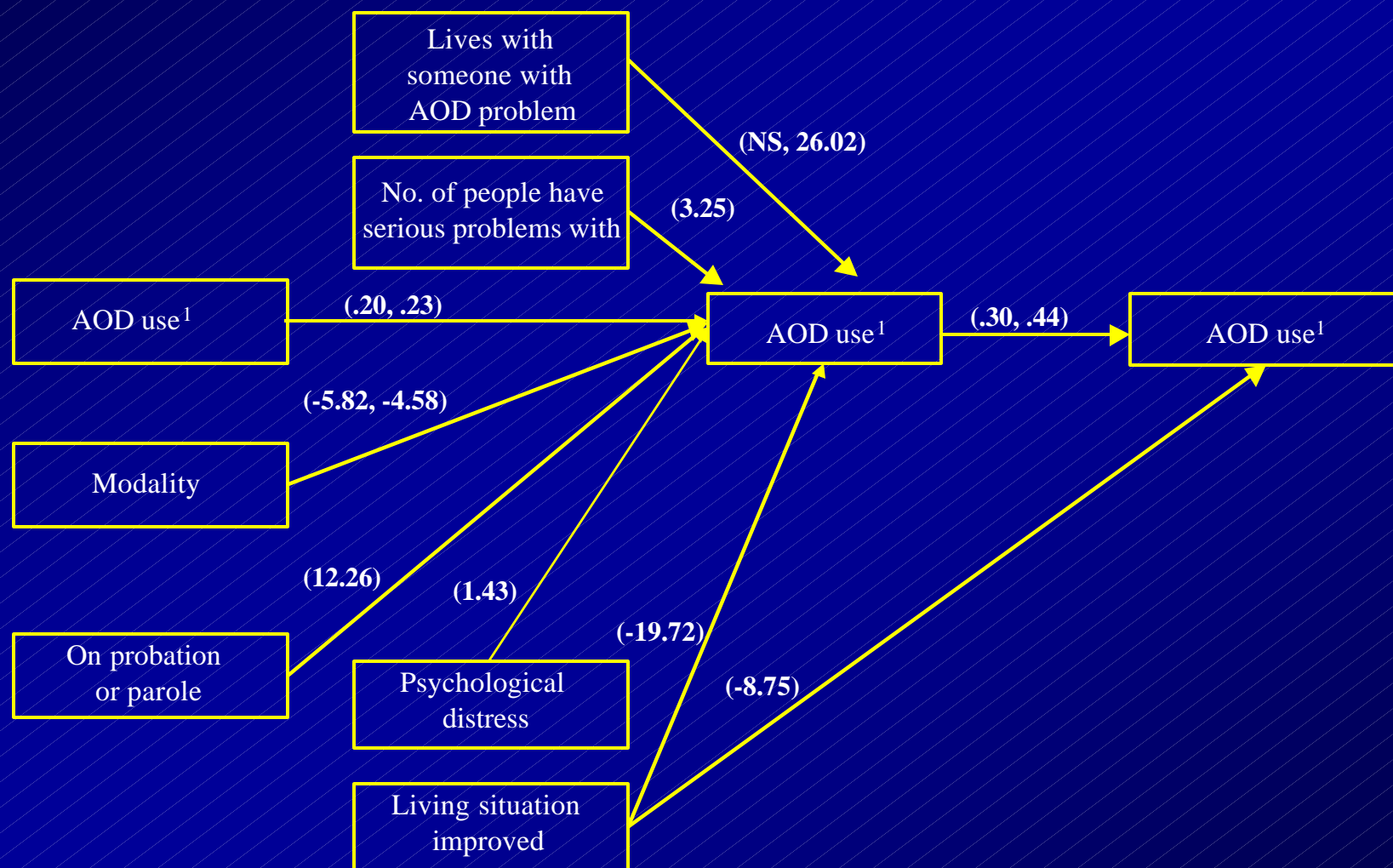
# Path Model of Gender Differences in AOD Use at 6-and 24-months

Intake Predictors

6-Month Predictors

AOD Use at 6-Months

AOD Use at 24-Months



$\chi^2(22) = 49.3, p < .001$ ; RMSEA = .05;  $R^2(\text{men}) = .10, (\text{women}) = .17$

<sup>1</sup>time frame is past 6 months; one coefficient = no gender difference, two coefficients = (men/women)

# Correlation of ASI Composite Scores with Any AOD Use at 24-month Follow-up<sup>1</sup>

	<u>Women</u>	<u>Men</u>
ASI-Psychological	0.23***	0.14**
ASI-Legal	0.15***	-0.10
ASI-Family	0.21***	0.02
ASI-Employment	0.23***	0.05
ASI-Medical	0.13**	0.15**
ASI-Drug use	0.73***	0.55***
ASI-Alcohol use	0.50***	0.70***

\*\* p < .001, \*\*\*p < .001

<sup>1</sup>Refers to past 30 days

# Conclusions

- Women in PETS-Chicago reported a shorter period between initiation of AOD use and treatment, more family/social problems, and higher rates of treatment utilization
- Predictors of continued AOD use for both men and women
  - ▶ legal supervision (+)
  - ▶ psychological distress (+)
  - ▶ having problems with others (+)
  - ▶ improvements in living situation (-)

# Conclusions

- Living with someone with an AOD problem was related to continued use at 6-months for women, but not men
- Prior AOD use was more strongly related to continued use at 6- and 24-months for women
- AOD use at 24-months was related to
  - ▶ psychological and medical problems for both men and women
  - ▶ legal, family, and employment problems for women only
  - ▶ higher rates of alcohol use among men and drug use among women

## Implications

- Greater severity of drug use and other problems, interrelationships of drug use and other areas of functioning, and higher rates of treatment utilization among women suggest fundamental differences in pathways to recovery for women and men
- Treatment protocols need to be tailored to address these gender differences in drug use patterns, treatment utilization, and the relationship of family issues and other problems to recovery